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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/098,997	06/17/1998	CARLOS GONZALEZ OCHOA	VALENZ-98-27	4745

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FELLERS SNIDER BLANKENSHIP
BAILEY & TIPPENS
THE KENNEDY BUILDING
321 SOUTH BOSTON SUITE 800
TULSA, OK 74103-3318

EXAMINER	
BROWN, RUEBEN M	
ART UNIT	**PAPER NUMBER**
2611	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/098,997	OCHOA, CARLOS GONZALEZ	
	Examiner	Art Unit	
	Reuben M. Brown	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17,22 and 28-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17,22 and 28-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/20/2004 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. In particular, Small is now relied upon to teach the newly recited feature of transmitting data within the "overscan portion of a video signal and at least one overscan scan line", which is different from using the VBI of video signal. Small teaches that it is desirable to utilize the overscan portion of a video signal to transmit any data, since the overscan portion is generally not-viewable by TV users with properly calibrated TV receivers, see col. 3, lines 41-67; col. 12, lines 21-25.

Thus one of ordinary skill in the art at the time the invention was made, would have been motivated to transmit any data, including EPG data, within the non-viewable range of scan lines, i.e., overscan portion of a standard video signal, as disclosed by Small.

As for applicant's arguments that Sprague does not teach transmitting the security key information in the video image spectrum, again Small is relied upon to teach transmitting any data in the overscan portion of the video image spectrum, and thus the combination reads on the claimed subject matter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman, (U.S. Pat # 6,125,259), in view of Small, (U.S. Pat # 6,040,870) and Collings, (U.S. Pat # 5,828,402).

Considering amended claim 17, the claimed remote unitary module (RM) for controlling access to a plurality of video channels that are distributed over a communications network, reads on the operation of the video blocking apparatus, set-top converter 507, STC shown in Fig. 4 of Perlman. The claimed communications network that has a head-end and at least one remote-end, such that the RM is positioned at the remote-end of the communications network, and is provided with a changeable list of permitted video channel numbers also reads on the disclosure of Perlman. The instant reference teaches that the parental control circuitry is located at the user premise, and to which the user is enabled to choose a list of channels permitted to be viewed; see col. 3, lines 51-60; col. 4, lines 5-20; col. 6, lines 9-15 & col. 9, lines 7-15.

Regarding the claimed feature of the changeable list containing at least one permitted video channel number; see Perlman col. 3, lines 51-60. As for the amended claimed feature of transmitting the changeable list of permitted channels within the overscan portion scan line(s) of a video signal, Perlman discloses that the EPG data may be transmitted on an out-of-band channel, col. 6, lines 49-65, or using other conventional extraction techniques. However, it is not explicitly disclosed that one of these techniques may include the overscan portion of a video signal. Nevertheless, Small teaches transmitting any data or information in the overscan portion of a video signal, col. 5, lines 10-25; col. 6, lines 31-34 & col. 12, lines 21-24.

It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Perlman with the technique of transmitting data in the overscan portion of a video signal, for the desirable benefit of taking advantage of scan lines that are already included

in a standard video signal, but are generally not displayed by standard TV sets, as taught by Small, col. 3, lines 40-67. Therefore, the further claimed feature of extracting from the at least one scan line, the embedded portion of changeable list of permitted channels is met by the combination of Perlman & Small.

As for the further recited feature, Perlman is directed to prohibiting the display of video channels not included within the list of permitted channels, col. 3, lines 51-67.

The claimed RM comprising a first tuner in electronic communication with the communications network is met by the operation of the tuner in conjunction with the STC 507, see col. 6, lines 25-37. As for the baseband output associated with a particular video channel number, Perlman delivers TV signals to a TV set, when the blocking apparatus is included within a STC 507, see col. 6, lines 9-30 & Fig. 1. The claimed means for changing the first tuner to receive a different video channel having a different channel number is necessarily included in Perlman, in that the user is enabled to select a variety of TV channels. The combination of Perlman & Small reads on the claimed feature of extracting at least a portion of the changeable list of permitted channels, from at least one transmitted overscan line. The additionally claimed CPU that senses that the tuner is tuned to a different channel number and determining whether the different channel number is in the changeable list is met by the operation of the microprocessor 301, which controls the circuitry; see col. 6, lines 30-33.

As for the claimed feature of switching between a digital image stored in RAM and the baseband video signal, Perlman merely teaches switching to another channel that is authorized, Fig. 2 (Step 206, 208). Nevertheless, Collings teaches that when the video signal is being blocked, an alternate video signal containing a graphic image may be displayed to the viewer, see col. 3, line 67 thru col. 4, lines 1-10, which reads on the claimed feature. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Perlman with the technique of switching to a graphic image, if a video channel is blocked, at least for the desirable advantage of informing the subscriber that the requested video channel has been blocked, as taught by Collings.

5. Claims 22 & 28-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman, Small & Collings, and further in view of Sprague, (U.S. Pat. # 5,247,575).

Considering claims 22, 28 & 37, even though the combination of Perlman, Small & Collings teaches transmitting authorization codes to a user premise, enabling reception of certain channels/programs, the instant references do not explicitly discuss assigning an individual security key code to each of a plurality of RM. Nevertheless, Sprague, which is directed to transmitting authorization data to subscribers in a video distribution system, teaches each user maintaining a unique key code that enables decoding of authorized material addressed to the

instant subscriber, col. 9, lines 40-54. In order to decode appropriate authorization data, the terminal's encryption/decryption key code is compared with the authentication contained within the transmitted access control data. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Perlman, Small & Collings with the feature of using individual security key codes for each user terminal, for the additional purpose of a securely authenticating user terminals, thereby ensuring that only the appropriate user terminals receive and store authorization data, as taught by Sprague.

Sprague also teaches that security code data, as well as authorization data may be embedded within a TV signal, see col. 9, lines 38-41. Hence, the further claimed feature of transmitting the security key within the overscan portion of the video signal, determining a local security key code for the RM, wherein the broadcast video image is received, extracting from the overscan portion any values representative of individual security key codes also reads on the combination of Perlman, Small (col. 5, lines 15-25 & col. 12, lines 21-24) and Sprague (col. 9, lines 58-65. Moreover, Sprague also teaches comparing the extracted security with the local security, to determine when to store downloaded data, col. 7, lines 45-51; col. 11, lines 35-41; col. 13, lines 25-55 & col. 15, lines 15-45.

As pointed out above, Small teaches that data which is generally transmitted using the VBI of video signal, may optionally be delivered in the overscan portion of the video signal, col. 6 lines 51-64.

As for the additionally claimed feature of identifying at least one of a plurality of RM for receiving a changed list of permitted video channels, the recited feature reads on the disclosure of Perlman that the user terminal's scrambler module 309 receives authorization status codes of all channels that *are receivable* by the user terminal, col. 8, lines 25-40. These authorization codes define, i.e. list the channels that are permitted for viewing by each individual subscriber.

Regarding the claimed feature of transmitting the changed list of programs over predetermined scan lines, such as a first scan line as recited in claim 28, Small teaches that a particular scan line may be used, such as line 22, 23 or 24, col. 5, lines 26-30; col. 5, lines 59-62; col. 6, lines 51-56 & col. 10, lines 19-48.

Finally, the claimed feature of determining whether a newly selected channel is among the list of permitted channels, and if so displaying the video program or displaying a different video channel is met by the operation of Perlman, (col. 10, lines 12-48). As for the claimed feature of the overscan scan line using the first scan line of the video image, Small teaches using line 22, which is generally considered the first line the visible (but non-viewable) image, see col. 6, lines 35-44).

Considering claims 29 & 39, Small teaches that one of the overscan scan lines 287-520, may be used.

Considering claim 30, the claimed elements of remote unitary module, which corresponds with subject matter mentioned above in the rejection of claims 17 & 22, are likewise analyzed. The additional claimed feature of the first tuner being configurable to accept at least two channels of video and switchably receiving a selected one of the two channels of video is necessarily included in the operation of Perlman.

The claimed video controller reads on the operation of the Close Caption and OSD device 60, of Collings, (col. 8, line 67 thru col. 9, lines 1-4 & col. 11, lines 50-64).

Considering claim 31, the claimed feature of a switchable tuner is included in Perlman (col. 6, lines 30-42).

Considering claim 32, see Collings, (col. 8, line 67 thru col. 9, lines 1-4 & col. 11, lines 50-64).

Considering claim 33, the STC 507 of Perlman & apparatus 20 of Collings necessarily transmit baseband video to a TV set.

Considering claims 34 & 36, the RF modulator 39 in Collings modulates all video signals on the same frequency, either channel 3 or channel 4.

Considering claim 35, the claimed video display device reads on the TV set 22 of Collings.

Considering claim 38, it would have been obvious for one of ordinary skill in the art at the time the invention was made, to embed as much information as possible on a single scan line, at least for the desirable purpose of reducing the encoding and decoding time, when multiple scan lines are used.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's claims.

A) Wehmeyer Teaches embedding EPG data in the overscan portion of the video signal, col. 1, lines 31-35 & col. 5, lines 35-40.

Any response to this action should be mailed to:

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or faxed to:
(703) 872-9314, (for formal communications intended for entry)
Or:
(703) 746-6861 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399. The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Grant Christopher can be reached on (703) 730-4755. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown


REUBEN M. BROWN
PATENT EXAMINER